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The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1. (currently amended) A method for preparing a microarray of frozen tissue and/or cell samples comprising the steps of:

(a) obtaining a donor sample from a donor block comprising a tissue or cell sample embedded in frozen embedding material;

(b) providing a recipient block comprising a frozen embedding material;

(c) providing a tissue microarray comprising a cooling chamber;

(d) generating a hole in said recipient block sized to receive said donor sample;

(e) filling said hole in said recipient block with said donor sample;

(f) repeating steps (a)-(e) to create a microarray block comprising a plurality of donor tissue and/or cell samples embedded in a block of frozen embedding material, each of said donor samples having a known location in said block;

~~(a) providing a microarray block comprising a plurality of donor tissue and/or cell samples embedded in a block of frozen embedding material, each of said donor samples having a known location in said block;~~

(g)~~(b)~~ sectioning said microarray block to generate a section comprising portions of said plurality of donor samples, each portion of each donor sample at a different sublocation in the section at coordinates corresponding to coordinates of the donor sample in the microarray block from which each portion was obtained; and

(h)~~(c)~~ placing said section on a substrate such that said portions at different sublocations are stably associated with said substrate, thereby generating said microarray.

2. (original) The method according to claim 1, wherein said microarray block comprises about 10 to about 1200 samples.

3. (original) The method according to claim 1, wherein at least one of said donor samples is a tissue sample.

4. (original) The method according to claim 1, wherein at least one of said donor samples is a cell sample.

5. (canceled)

6. (canceled)

~~7. (currently amended) The method according to claim 15, wherein said obtaining is~~ performed by using a coring needle comprising a cutting edge and wall defining a lumen to core a donor sample.

8. (currently amended) The method according to claim ~~6 or~~7, wherein said core is in the shape of a cylinder.

9. (original) The method according to claim 8, wherein said core is about 0.3 mm in diameter.

10. (original) The method according to claim 8, wherein said core is about 0.6 mm in diameter.

11. (original) The method according to claim 8, wherein said core is greater than about 0.6 mm.

12. (currently amended) A method of generating a microarray block, comprising the steps of:

(a) obtaining a donor sample from a donor block comprising a tissue or cell sample embedded in frozen embedding material;

(b) providing a recipient block comprising a frozen embedding material,

(c) providing a tissue microarrayer comprising a cooling chamber;

(d)~~(c)~~ generating a hole in said recipient block sized to receive said donor sample; and

(e)~~(d)~~ filling said hole with said donor sample.

13. (currently amended) The method according to claim 12, further comprising repeating steps (a) to (e)~~(d)~~ multiple times.

14. (currently amended) The method according to claim 1~~6~~ or 13, wherein said method is automated.

15. (original) The method according to claim 14, wherein information relating to the location of each donor sample in said recipient block is stored in a database.

16-34. (withdrawn from consideration)

35. (original) A microarray comprising a substrate on which a plurality of frozen tissue or frozen cell samples are disposed at a plurality of known sublocations made according to the method of claim 1.

36. (original) The microarray according to claim 35, wherein at least one sample is from a human.

37. (original) The microarray according to claim 35, wherein at least one sample is from an individual having a disease.

38. (original) The microarray according to claim 37, wherein said disease is a progressive disease, and said microarray comprises a plurality of samples representing different stages in the progression of the disease.

39. (original) The microarray according to claim 37, wherein said disease is cancer.

40. (original) The microarray according to claim 37, wherein said disease is a neurodegenerative disease.

41. (original) The microarray according to claim 37, wherein said disease is a neuropsychiatric disease.

42. (original) The microarray according to claim 35, comprising both tissue samples and cell samples.

43. (original) The microarray according to claim 35, comprising a plurality of different types of tissue samples from the same individual.

44. (original) The microarray according to claim 36, comprising at least 5 different tissue types from the same individual.

45. (original) The microarray according to claim 35, comprising at least 10 different tissue types from the same individual.

46. (original) The microarray according to claim 35, further comprising a cell sample from said individual.

47. (original) The microarray according to claim 46, wherein said cell sample is from a bodily fluid from said individual.

48. (original) The microarray according to claim 35, wherein at least one sample is from a fetus.

49. (original) The microarray according to claim 35, wherein at least one sample is from a non-human animal.

50. (original) The microarray according to claim 49, wherein said non-human animal comprises at least one cell comprising an exogenous nucleic acid.

51. (original) The microarray according to claim 50, wherein said non-human animal is a model of a disease.

52. (original) The microarray according to claim 51, wherein said non-human animal has been treated with a therapy for treating said disease.

53. (currently amended) The microarray according to claim 35~~16~~, wherein at least one donor sample is from a plant.

54. (original) A method of evaluating a tissue or cell sample, comprising:

providing the microarray of claim 35;

contacting said microarray with a molecular probe; and

determining which sublocations of said microarray react with said molecular probe.

55. (original) The method according to claim 54, wherein said evaluating comprises correlating reactivity of said probe with one or more characteristics of the individual from which a sample at a reacted sublocation was obtained.

56. (original) The method according to claim 55, wherein said one or more characteristics comprises the presence of a disease.

57. (original) The method according to claim 56, wherein said correlating identifies the molecular probe as a candidate diagnostic probe for detecting said disease.

58. (original) The method according to claim 56, wherein at least one of said samples from said microarray is from an individual treated with a drug for treating a disease.

59. (original) The method according to claim 56, wherein said individual treated with said drug has the disease.

60. (original) The method according to claim 58 or 59, further comprising comparing the reactivity of said at least one of said samples to a sample from an individual not treated with said drug.

61. (original) The method according to claim 60, wherein said individual not treated with said drug does not have said disease.

62. (original) The method according to claim 56, wherein said disease is cancer.

63. (original) A method for identifying the specificity of a molecular probe comprising:

providing the microarray of claim 35, wherein said microarray comprises a plurality of different types of tissue samples from the same individual;

reacting said microarray with said molecular probe; and

determining which of said tissue samples react with said molecular probe.

64. (original) The method according to claim 63, wherein said plurality comprises at least about 5 different tissue samples.

65. (original) The method according to claim 63, wherein said microarray further comprises at least one cell sample from a bodily fluid of said individual.

66-69. (withdrawn from consideration)